[54] **METHOD OF MONITORING ITEM SHUFFLING IN A POST-SCAN AREA OF A SELF-SERVICE CHECKOUT TERMINAL**

[75] Inventors: **Dusty L. Lutz**, Lawrenceville; **Christopher A. Malchak**, Alpharetta; **Timothy E. Mason**, Buford, all of Ga.; **Ali M. Vassigh**, San Diego, Calif.

[73] Assignee: **NCR Corporation**, Dayton, Ohio

[21] Appl. No.: **09/071,024**

[22] Filed: **May 1, 1998**

[51] **Int. Cl.**[6] **A47F 9/04**

[52] **U.S. Cl.** **186/61**; 235/383

[58] **Field of Search** 186/61, 66, 62; 235/383

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,878,365	4/1975	Schwartz	235/61.7 R
4,661,908	4/1987	Hamano et al.	364/405
4,779,706	10/1988	Mergenthaler	186/61
4,787,467	11/1988	Johnson	235/383 X
5,125,465	6/1992	Schneider	177/50
5,191,749	3/1993	Cappi et al.	53/502
5,637,847	6/1997	Watanabe	235/383
5,898,158	7/1994	Shimizu et al.	186/62 X

Primary Examiner—F. J. Bartuska
Attorney, Agent, or Firm—Maginot, Addison & Moore

[57] **ABSTRACT**

A method of monitoring item shuffling in a post-scan area of a self-service checkout terminal having a post-scan shelf, a bagwell with a grocery container positioned therein, and a weight scale positioned so as to detect weight of items positioned both on the post-scan shelf and in the grocery container, includes the step of detecting removal of a first number of items from the post-scan shelf with the weight scale and generating a first weight decrease value in response thereto which corresponds to the weight of the first number of items. The method also includes the step of detecting placement of a second number of items into the grocery container with the weight scale and generating a first weight increase value in response thereto which corresponds to the weight of the second number of items. The method further includes the step of comparing the first weight decrease value to the first weight increase value and generating a first match control signal in response thereto if the first weight decrease value matches the first weight increase value.

20 Claims, 11 Drawing Sheets